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Siemens Corporation
Intellectual Property Department
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EXAMINER
MOLINARI, MICHAEL J

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 05/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _13 November 2000_ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under _Ex parte Quayle_, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-20_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-20_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _4_ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Objections

1.   Claim 19 is objected to because of the following informalities: Line 3 of the claim refers

to "a first protocol", but should refer to "the first protocol". Line 4 of the claim refers to "a

second protocol", but should refer to "the second protocol". Appropriate correction is required.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

3.   Claims 1-3, 5-12, and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Sayers et al. (U.S. Patent No. 6,539,237) in view of Kumaki et al. (U.S. Patent No.

6,473,411), further in view of Huang et al. (U.S. Patent No. 6,292,829).

4.   Referring to claim 1, Sayers et al. disclose a system for providing management protocol

mediation between wireless networks comprising: a first wireless network (Public Wireless

Network, see 1, #15, see also column 8, lines 26-27) operable to communicate with a mobile

station (see Fig. 1, #4 and see column 8, line 33) over a wireless interface; a second wireless

network (see Fig. 1, #14 and see column 8, lines 53-59) having an operations and maintenance

center (OMC) coupled thereto (OMC-R and OMC-S, see Fig. 1, #7 and #9); the OMC operable

to manage the second wireless network using a second management protocol (See column 8,

lines 5-8, which show that the private wireless network is IP-based. Column 15, lines 50-65

show that the management protocol used for the private wireless network is SNMP and that the

OAM commands are from an OMC). Sayers et al. differ from claim 1 in that they fail to disclose

the use of a first management protocol, by the OMC, to manage the first wireless network.

However, the use of a management protocol in a wireless network such as that taught by Sayers

et al. is well known in the art. For example, Kumaki et al. teach the use of CMIP (see column

16, lines 17-43), which is a common network management protocol, for managing a wireless

network, which has the advantage of being a standard network management protocol that can be

used in wireless networks. One skilled in the art would have recognized the advantage of using

CMIP as taught by Kumaki et al. Therefore, it would have been obvious to a person with

ordinary skill in the art at the time of the invention to incorporate the use of CMIP as taught by

Kumaki et al. into the invention of Sayers et al. to achieve the advantage of managing the first

wireless network using a standard network management protocol. Sayers et al. in view of

Kumaki et al. differ from claim 1 in that they fail to disclose the use of a protocol mediator

coupled to the first and second wireless networks, the protocol mediator operable to translate

between the first management protocol and the second management protocol. However, the use

of protocol mediators to enable network managers to manage networks running on other

protocols are well known in the art. For example, Huang et al. teach the use of just such a

protocol mediator (see column 2, lines 19-32), which has the advantage of enabling a network

manager to manage multiple networks using a plurality of network management protocols. One

skilled in the art would have recognized the advantage of using a protocol mediator as taught by

Huang et al. Therefore, it would have been obvious to a person with ordinary skill in the art at

the time of the invention to incorporate the use of a protocol mediator as taught by Huang et al.

into the invention of Sayers et al. in view of Kumaki et al. to achieve the advantage of enabling a

network manager to manage multiple networks using a plurality of network management

protocols.

5.   Referring to claim 2, Kumaki et al. disclose that the first management protocol comprises

a Common Management Information Protocol management protocol (see column 16, lines 17-

43).

6.   Referring to claim 3, Sayers et al. disclose that the second management protocol

comprises a Simple Network Management Protocol management protocol (See column 8, lines

5-8, which show that the private wireless network is IP-based. Column 15, lines 50-51 show that

the management protocol used for the private wireless network is SNMP).

7.   Referring to claim 5, Sayers et al. disclose that the first wireless network comprises: a

base station (BTS, see Fig. 1, #12) operable to communicate with the mobile station (see Fig. 1,

#4) over the wireless interface; and a wireless adjunct internet platform (WARP) (BSC, see Fig.

1, #16) coupled to the base station and operable to communicate with the mobile station through

the base station (see column 3, lines 42-48).

8.   Referring to claim 6, Sayers et al. disclose that the WARP (BSC) is operable to manage

the base station using a third management protocol (see column 3, lines 42-48) and that the BSC

uses different interfaces between the BSS and NSS. Sayers et al. differ from claim 6 in that they

fail to disclose that the WARP comprising a mediation function operable to translate between the

second management protocol and the third management protocol. However, the Examiner takes

official notice that such conversion by a BSC in order to communicate using different protocols on different interfaces is old and well known in the art.

9.   Referring to claim 7, Sayers et al. disclose that the third management protocol comprises a Global System for Mobile communication (GSM) Abis object oriented management protocol (see column 3, lines 42-43).

10.   Referring to claim 8, Sayers et al. disclose a public land mobile network (PLMN) gateway (MSC, see Fig. 1, #17) coupling the WARP and the OMC, the PLMN gateway operable to communicate with the WARP and the OMC.

11.   Referring to claim 9, Sayers et al. differ from claim 9 in that they disclose an A-Interface coupling the WARP and the PLMN gateway, not an Internet Protocol (IP) network coupling the WARP and the PLMN gateway. However, the Examiner takes official notice that the use of an IP network to couple the BSC to the MSC is old and well known in the art.

12.   Referring to claim 10, Sayers et al. disclose a management center for providing management protocol mediation between wireless networks comprising: an operations and maintenance center (OMC) (see Fig. 1, #7 and #9) operable to manage a first (Public Wireless Network, see Fig. 1, #15) and second wireless networks (Private Network, see Fig. 1, #14), the OMC further operable to manage the second network using a second management protocol (See column 8, lines 5-8, which show that the private wireless network is IP-based. Column 15, lines 50-65 show that the management protocol used for the private wireless network is SNMP and that the OAM commands are from an OMC). Sayers et al. differ from claim 10 in that they fail to disclose the use of a first management protocol, by the OMC, to manage the first wireless network. However, the use of a management protocol in a wireless network such as that taught

by Sayers et al. is well known in the art. For example, Kumaki et al. teach the use of CMIP (see

column 16, lines 17-43), which is a common network management protocol, for managing a

wireless network, which has the advantage of being a standard network management protocol

that can be used in wireless networks. One skilled in the art would have recognized the

advantage of using CMIP as taught by Kumaki et al. Therefore, it would have been obvious to a

person with ordinary skill in the art at the time of the invention to incorporate the use of CMIP as

taught by Kumaki et al. into the invention of Sayers et al. to achieve the advantage of managing

the first wireless network using a standard network management protocol. Sayers et al. in view

of Kumaki et al. differ from claim 10 in that they fail to disclose the use of a protocol mediator

coupled to the first and second wireless networks, the protocol mediator operable to translate

between the first management protocol and the second management protocol. However, the use

of protocol mediators to enable network managers to manage networks running on other

protocols are well known in the art. For example, Huang et al. teach the use of just such a

protocol mediator (see column 2, lines 19-32), which has the advantage of enabling a network

manager to manage multiple networks using a plurality of network management protocols. One

skilled in the art would have recognized the advantage of using a protocol mediator as taught by

Huang et al. Therefore, it would have been obvious to a person with ordinary skill in the art at

the time of the invention to incorporate the use of a protocol mediator as taught by Huang et al.

into the invention of Sayers et al. in view of Kumaki et al. to achieve the advantage of enabling a

network manager to manage multiple networks using a plurality of network management

protocols.

13.   Referring to claim 11, Kumaki et al. disclose that the first management protocol comprises a Common Management Information Protocol management protocol (see column 16, lines 17-43).

14.   Referring to claim 12, Sayers et al. disclose that the second management protocol comprises a Simple Network Management Protocol management protocol (see column 8, lines 5-8, which show that the private wireless network is IP-based. Column 15, lines 50-51 show that the management protocol used for the private wireless network is SNMP).

15.   Referring to claim 14, Sayers et al. in view of Kumaki et al., further in view of Huang et al. differ from claim 4 in that they fail to disclose a router coupled to the OMC and the protocol mediator, the router operable to transmit and receive management messages over an Internet Protocol (IP) network. However, the Examiner takes official notice that the use of an IP network to couple the BSC to the MSC is old and well known in the art and that IP networks use routers to facilitate communication between nodes.

16.   Referring to claim 15, Sayers et al. in view of Kumaki et al., further in view of Huang et al. differ from claim 4 in that they fail to disclose that the OMC communicates with the protocol mediator through the router. However, the Examiner takes official notice that the use of an IP network to couple the BSC to the MSC is old and well known in the art and that IP networks use routers to facilitate communication between nodes.

17.   Referring to claim 16, Sayers et al. disclose a method comprising the step of managing a second wireless network (Private Network, see Fig. 1, #14) using a second management protocol (SNMP, see column 15, lines 50-51). Sayers et al. further disclose a second wireless network (Public Wireless Network, see Fig. 1, #15), but are silent as to which protocol to use to manage

the network. However, the use of a management protocol in a wireless network such as that taught by Sayers et al. is well known in the art. For example, Kumaki et al. teach the use of CMIP (see column 16, lines 17-43), which is a common network management protocol, for managing a wireless network, which has the advantage of being a standard network management protocol that can be used in wireless networks. One skilled in the art would have recognized the advantage of using CMIP as taught by Kumaki et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of CMIP as taught by Kumaki et al. into the invention of Sayers et al. to achieve the advantage of managing the first wireless network using a standard network management protocol. Sayers et al. in view of Kumaki et al. differ from claim 16 in that they fail to disclose translating between the first management protocol and the second management protocol. However, the use of protocol mediators that perform translation to enable network managers to manage networks running on other protocols are well known in the art. For example, Huang et al. teach the use of just such a protocol mediator (see column 2, lines 19-32), which has the advantage of enabling a network manager to manage multiple networks using a plurality of network management protocols. One skilled in the art would have recognized the advantage of using a protocol mediator as taught by Huang et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of a protocol mediator as taught by Huang et al. into the invention of Sayers et al. in view of Kumaki et al. to achieve the advantage of enabling a network manager to manage multiple networks using a plurality of network management protocols.

18.   Referring to claim 17, Kumaki et al. disclose that the first management protocol comprises a Common Management Information Protocol management protocol (see column 16, lines 17-43).

19.   Referring to claim 18, Sayers et al. disclose that the second management protocol comprises a Simple Network Management Protocol management protocol (See column 8, lines 5-8, which show that the private wireless network is IP-based. Column 15, lines 50-51 show that the management protocol used for the private wireless network is SNMP).

20.   Referring to claim 19, Huang et al. disclose that translating between the management protocols comprises: mapping an instruction supported by a first protocol to an equivalent instruction supported by a second protocol; mapping a parameter supported by the first protocol to an equivalent parameter supported by the second protocol; and composing a message supported by the second protocol using the equivalent instruction and the equivalent parameter (see Figures 5A and 5B; Huang et al. teach the method throughout the reference, however, column 6, lines 33-51, column 7, lines 17-20, and column 9, lines 40-44, illustrate details that are especially relevant). This method has the advantage of allowing network management using two network protocols and a single MIB (see column 2, lines 45-48). One skilled in the art would have recognized the advantage of translating between SNMP and CMIP as taught by Huang et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the method of translating between SNMP and CMIP as taught by Huang et al. into the invention of Sayers et al. in view of Kumaki et al., further in view of Huang et al. to achieve the advantage of allowing network management using two network protocols and a single MIB.

21.   Referring to claim 20, Sayers et al. disclose the steps of: managing a base station in the second wireless network using a third management protocol (see column 3, lines 42-48) and that the BSC uses different interfaces between the BSS and NSS. Sayers et al. differ from claim 20 in that they fail to disclose translating between the second and third management protocols. However, the Examiner takes official notice that such conversion by a BSC in order to communicate using different protocols on different interfaces is old and well known in the art.

22.   Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sayers et al. in view of Kumaki et al., further in view of Huang et al. as applied to claim 1 above, and further in view of Newton ("Newton's Telecom Dictionary, 13th Edition").

23.   Referring to claim 4, Sayers et al. in view of Kumaki et al., further in view of Huang et al. differ from claim 4 in that they fail to disclose that the protocol mediator is coupled to the OMC by a first Telecommunications Network Management interface, and the protocol mediator is coupled to the first wireless network by a second Telecommunications Network Management interface. However, the use of TMN interfaces to connect to networks using network management protocols such as CMIP and SNMP is old and well known in the art. For example, Newton teaches the use of TMN interfaces to connect to networks using CMPI and SNMP and teaches that the interfaces have the advantage of being useful in multi-service environments. One skilled in the art would have recognized the advantage of using TMN interfaces as taught by Newton. Therefore, it would have been obvious for a person with ordinary skill in the art at the time of the invention to incorporate the use of TMN interfaces as taught by Newton into the invention of Sayers et al. in view of Kumaki et al., further in view of Huang et al. to achieve the advantage of using interfaces adapted for use in a multi-service environment.

24.   Referring to claim 13, Sayers et al. in view of Kumaki et al., further in view of Huang et

al. differ from claim 13 in that they fail to disclose that the protocol mediator is coupled to the

OMC by a Telecommunications Network Management interface. However, the use of TMN

interfaces to connect to networks using network management protocols such as CMIP and

SNMP is old and well known in the art. For example, Newton teaches the use of TMN interfaces

to connect to networks using CMPI and SNMP and teaches that the interfaces have the

advantage of being useful in multi-service environments. One skilled in the art would have

recognized the advantage of using TMN interfaces as taught by Newton. Therefore, it would

have been obvious for a person with ordinary skill in the art at the time of the invention to

incorporate the use of TMN interfaces as taught by Newton into the invention of Sayers et al. in

view of Kumaki et al., further in view of Huang et al. to achieve the advantage of using

interfaces adapted for use in a multi-service environment.

Conclusion

25.   The examiner requests that Applicant provide the serial numbers and status of the

copending applications listed on page 1 of the instant specification.

        Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael J Molinari whose telephone number is (703) 305-5742.

The examiner can normally be reached on Monday-Friday 9am-5:30pm.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Huy Vu can be reached on (703) 308-6602. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 872-9314 for regular

communications and (703) 872-9315 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-3900.

Michael Joseph Molinari
May 19, 2003

ALPUS H. HSU
PRIMARY EXAMINER